



Senior Lesson Plan 2 – Staying Safe with Electricity

Objectives

1. Identify the safe and unsafe ways of using electricity at home and outdoors
2. Explore how accidents can happen and what can be done to prevent them from happening

Introduction

Recap on what the children learned about electricity in lesson 1 and about the journey that electricity goes on to reach homes and schools. Ensure that children are familiar with the vocabulary (pylons, mini pillars, volts).

Where electricity is produced from fossil fuels e.g. coal, oil, gas, the fuels are burned in a large furnace, creating immense heat. The walls of the furnace contain tubes of water. The heat turns the water into steam, which travels along pipes until it pushes against large turbine blades, which it turns very fast. The turbine is connected to an electricity generator, which spins and creates electricity.

Explain to the class that sometimes children can get shocks by ignoring safety advice and doing things they know they shouldn't do while playing outdoors. There are lots of ways to remember how to stay safe around electricity. Thinking back to the journey that electricity goes on from the power station to reach our homes and schools in the introduction, ask the children to identify how these places and certain activities can be potentially dangerous if people do not 'stay safe stay clear' and ignore electricity safety rules.

Resources

Stay Safe, Stay Clear safety tips PDF, paper, pencils, colouring markers/crayons.

Whole Class Activity

There are lots of ways to remember how to stay safe around electricity. Thinking back to the flow of electricity from power station to the home, ask the children to identify how these places and certain activities can be potentially dangerous if people do not 'stay safe stay clear' and ignore electricity safety rules.

Download the Stay Safe, Stay Clear safety tips from www.esbnetworks.ie/education and display for the class to see (or use the poster that came in your pack). Read through the tips and ensure the children understand the following:

- **Stay away from places marked with a danger sign**
The danger sign is there as a warning that there is something harmful (and potentially fatal) if you aren't careful. You will see danger signs, for example, on electricity poles, pylons, electricity stations and mini pillars (on footpaths).
- **Never climb trees near overhead wires**
Stay away from all overhead wires and never climb trees near them. Even if you don't touch the overhead wires, electricity could "jump" through the air and electrocute you.
- **Never fly a kite near overhead wires**
Never fly kites near overhead wires. If your kite goes near the overhead wires - let it go! If it gets stuck, leave it there and call ESB Networks on 1850 372 999 or the Gardai. If the kite string is hanging down don't touch it, as electricity can travel along the string.
- **Never fish near overhead wires**
When you are fishing, keep clear of overhead wires. If the fishing rod or line touches or comes close to the wire, electricity could flow through the rod and injure or kill you. Always take your rod apart when moving from one location to another.
- **Never approach a fallen wire, tell an adult**
Never ever touch or go near fallen wires. Tell an adult and call ESB Networks on 1850 372 999.
- **Never climb a pylon**
Climbing electricity pylons is very dangerous. Even if you don't touch the overhead wires, electricity could "jump" through the air and electrocute you.



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Group Activity

How might they share these tips with others? How can accidents be prevented?

Using A4 paper, ask the children to pick one of the Stay Safe, Stay Clear safety tips.

Explain that they are to create a poster to tell other children how to be safe around electricity. It is important to encourage them to have just one clear message and use pictures to reinforce it.

These posters can be entered into the Stay Safe, Stay Clear with ESB Networks competition. Winning entries will receive a prize for their school and will be featured in a calendar that will be sent to Primary Schools nationwide.

A Top Tips for Creating Your Poster PDF can be downloaded from www.esbnetworks.ie/education to help children with ideas on how to make their message stand out.

Extension

Ask the children to create their own safety tips for being safe around electricity in the home.

Useful websites

www.esbnetworks.ie/education

www.askaboutireland.ie/learning-zone/primary-students/3rd--4th-class/science/electricity/